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ABSTRACT

A two-year evaluation of William Glasser's Schools Without Failure (SWF) program was carried out in the New Castle School District in Pennsylvania. Ten elementary schools were paired on the basis of size, socioeconomic status, and past achievement of pupils. In the first year, one school of each pair was randomly assigned to begin teacher training and implementation of the SWF program; in the second year of the study, both groups of schools received training in SWF methods and implemented the program. Data were collected and analyzed to determine whether the second year or the first year produced stronger changes and how schools that received two years of training differed from traditional schools. Tests and observations were conducted at the beginning and end of the first year and at the end of the second year. Measurements were taken of pupil achievement and attitudes, teacher and parent attitudes, disciplinary referrals to principals, and classroom interactions. (Author/JG)

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FINAL REPORT

THE EFFECTS OF A SCHOOLS WITHOUT FAILURE PROGRAM UPON CLASSROOM INTERACTION PATTERNS, PUPIL ACHIEVEMENT AND TEACHER, PUPIL AND PARENT ATTITUDES

(Summary Report of a Two-Year Study)

National Institute of Education Project No. 3-0714

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The New Castle substitute teachers we hired as classroom observers deserve acknowledgment for their conscientious efforts. Their abilities to learn the difficult observation systems, coupled with the effective training sessions held by Richard Ober and Edmund Amidon and the advice given us by Harold Mitzel, contributed to the effectiveness of the classroom observation segment of our project.

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Finally, as the study was carried out, a great deal of time and effort went into such tasks as packaging tests for distribution to teachers, coding data on to sheets for keypunching and typing the final product of our efforts. We would like to thank the clerical staff of the Research Division, Pennsylvania Department of Education (particularly Nancy Grissinger), for their unfailing support throughout this project.

ABSTRACT

A two-year evaluation of William Glasser's Schools Without Failure (SWF) program was carried out in the New Castle School District in Pennsylvania. In the first year 10 elementary schools were paired on the basis of size, socioeconomic status and past achievement of pupils. One school of each pair was randomly assigned to begin teacher-training and implementation of the SWF program; the other school of each pair became a control school, continuing to operate as it had in the past. In the second year of the study both groups of schools received training in SWF methods and implemented the program. Data were collected and analyses performed to determine whether the effects of two years of the program were greater than the effects of one year, whether the second year of training or the first year produced stronger changes and how the effects of two years of the program differed from those which would have taken place in schools using a traditional program.

Testings and observations were carried out at the beginning and the end of the first year of the study and at the end of the second year in both groups of schools. Measurements were taken of pupil achievement, of pupil, teacher and parent attitudes, of disciplinary referrals to principals and of interactions occurring in classrooms.

The results of the study indicated that, by the end of two years, rather major changes had taken place in teacher classroom behaviors. Teachers participating in two years of training were found to question more, to lecture less, to accept pupil ideas more and to praise and criticize less than they had before undergoing training. Disciplinary referrals to principals were reduced greatly; teachers were able to use Reality Therapy to effectively handle most discipline problems by themselves.

Intermediate pupils exposed to the SWF program for two years felt that school and learning were more important than did pupils never exposed to the program. There were indications that primary pupils participating in the SWF program were developing increased confidence in dealing with difficult schoolwork.

NOTE: A full technical report is available from the Division of Research on request...

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CHAPTER I

INTRODUCTION

I. STATEMENT OF PROBLEM

In this rapidly changing world and dynamic American society, the school remains a complex institution for socializing the young. Indoctrination into the ways and learning of their elders was perhaps adequate for youth in an earlier, relatively stable society. It appears woefully inadequate today. In response to this problem the educational establishment has been feverishly trying to find ways to cope with the problems caused by an expansion in technological knowledge much exceeding the growth in sociological knowledge.

One of the most popular responses to the problems apparent in current society has been "humanization of education" programs. Among these programs is one that follows the philosophy and procedure outlined by William Glasser in his book, Schools Without Failure. What Glasser advocates can be adapted to almost any school organization or situation. The program involves children in learning to use facts and ideas to make responsible decisions about their educational, social and emotional lives.

The major purpose of the present two-year investigation was to see how the attitudes and behaviors of pupils and teachers were changed by a one-year and by a two-year exposure to the Schools Without Failure program.

II. RELATED STUDIES

When the first-year report on the New Castle Project was submitted (Masters and Laverty, 1974), not much in the way of controlled studies or well-documented data could be found. A major effort by the National Consortium on Humanizing Education has been completed since that time. Aspy and Roebuck (1974) have published a summary of 15 studies performed on a mountain of data collected by the NCHE. Using student achievement tests and self-concept measures, teacher attitude scales and audio-tapes of classroom and faculty meeting interactions from which behavioral observations were abstracted, these studies analyzed the effects on student behavior of training teachers in interpersonal skills. Aspy and Roebuck found significant predictive relationships between principals' interpersonal behavior and teachers' classroom behavior. Where principals differed in their levels of interpersonal functioning, teachers in their schools not only showed different classroom behavior but also reported different perceptions of their working environment and instructional tasks. In addition, prior training of the principal enhanced the teachers' response to interpersonal skills training. Where teachers functioned at high levels of acceptance and responsiveness, students missed fewer days of school and gained in self-concept and achievement. These student gains were more pronounced in the second and third years of the project.

In a study of the Schools Without Failure (SWF) program, Keepes, Engle and Thorne (1971) attempted to assess the effects of SWF in Palo Alto, Calif., School District with the use of a comparison design. Although the project was confounded by implementation problems, such as SWF-trained teachers being in the control school, they did find that the SWF program made pupils more task-oriented and more likely to be involved in work activities, as opposed to socialization, than

the control school pupils. The first year of the present project (Masters and Laverty, 1974) similarly revealed some positive changes in SWF intermediate pupil attitudes toward the importance of doing school assignments and of learning.

Another study of SWF in Imperial Beach, California, (McCormick, 1972) depended almost entirely upon subjective data. Teachers felt students could openly participate in intellectual discussions and discuss school problems as a result of class-meeting training. Landry (1973) evaluated a TV course in SWF techniques. Using an attitude rating scale and follow-up observation, he discovered that experienced teachers (16 or more years) gave a higher rating to the TV course, had more positive attitudes toward class meetings, held more meetings per week and had a better class-meeting performance rating than less experienced teachers. All the correlations between these variables were positive, but not all were significant.

Marc Robert (1971), investigating the role perceptions of teachers in large suburban elementary schools, found that teachers participating in SWF seminars were more oriented toward meeting personality needs of individuals and less threatened by innovation than were nonparticipants. SWF training also helped principals to more accurately assess teachers' role perceptions.

In Riverside, California, Purl and Dawson (1971) surveyed teachers, pupils and principals to determine behavior change as a result of SWF training. They found that most teachers used classroom meetings as a method of involving pupils, thereby improving communication and inducing a feeling of mutual responsibility. Pupils indicated they felt involved, took responsibility for their own behavior and strongly felt that learning to read was important.

Gang (1974) investigated the use of a reality therapy intervention process with individual problem children. In the small sample of two teachers and six pupils, reality therapy methods worked where a good student-teacher relationship was established. On a much larger scale in Madison, Wisconsin, Jensen (1972) measured the attitudes of teachers who received SWF training. He found that teachers at all grade levels who received SWF training were favorably disposed toward the SWF principles and practices, with elementary teachers showing a more positive attitude than secondary or middle school teachers. These teachers also felt that implementing SWF in the classroom improved teacher-pupil communication and student attitudes.

Butterworth (1971) did pre- and posttesting of teachers' attitudes toward teaching as recommended by Glasser. Using three groups, i.e., beginning SWF teachers, advanced SWF teachers and control teachers, she found that the majority of all three groups showed attitude changes in the direction of becoming more favorable to the Glasser philosophy. However, 80 per cent of the advanced SWF group, 66 per cent of the beginning SWF group and only 60 per cent of the control group changed in a positive direction between pretest and posttest.

It appears that statistically significant differences either were not sought or were not found in most SWF studies. Positive testimonials by participating teachers in favor of SWF philosophy and techniques can be found associated with most trials, but evidence of measurable differences is difficult to find. In general, it might be said that teachers change their attitudes, becoming more favorable toward the Glasser philosophy and program as they become more involved in seminars, class-

room meetings and other SWF program facets. As these teacher attitudes are reflected in classroom behavior, pupils begin to have a better attitude toward school. If the SWF program is to be improved so it more effectively meets the needs of children, more information about the effects of the program must be made available.

III. OBJECTIVES

The major objectives of this study, conducted for its second year in grades 1 through 6, were to answer the following questions:

1. Does the Schools Without Failure program significantly affect pupil attitudes toward self and school?

2. Does the Schools Without Failure program significantly affect pupil achievement in basic skills?

3. Does the Schools Without Failure program significantly affect teacher attitudes toward child-centered policies and practices in education, toward the philosophy of William Glasser and toward teaching as a career?

4. Does the Schools Without Failure program significantly affect parental attitudes toward the philosophy of William Glasser?

5. Does the Schools Without Failure program significantly affect classroom cognitive interaction patterns and classroom social-emotional climate?

CHAPTER II

PROCEDURES

I. SAMPLE SELECTION

The study was carried out in New Castle, Pennsylvania, a small city representative of many declining urban areas throughout the United States. The area has experienced considerable outmigration, and approximately 25 per cent of the school population is from economically disadvantaged homes, i.e., families with yearly incomes below $3,000.

In the spring of 1972, 10 of the 11 elementary schools in New Castle were paired on the basis of size, socioeconomic status and achievement test scores from the previous year. From each pair one school was randomly assigned to the experimental treatment group and the other school to the control group.

The total sample consisted of about 150 teachers and 3,500 pupils in grades 1 to 6 of 10 New Castle schools.

II. DESIGN OF THE STUDY

During the first year of the study a Pretest-Posttest Control Group Design (Number 4, Campbell and Stanley, 1966, p. 8) was used. For most analyses control and experimental classes in grades 1 to 3 formed one 2 by 3 factorial design and classes in grades 4 to 6 formed a second 2 by 3 factorial. In a few instances all grades were included in a single analysis, or some other grouping more applicable to the data was used. Classroom means were the unit of analysis.

The design for the second year study is an extension of the first year design, where the control group now receives the experimental treatment and the experimental group receives additional treatment. In the following schematic representation R represents random assignment of groups to experimental treatments, O represents observations or measurements, and X represents exposure of a group to the Schools Without Failure program.

		Fall 1972		Spring 1973		Spring 1974
Group 1	R	O_1	X_1	O_2	X_2	O_3
Group 2	R	O_1		O_2	X_1	O_3

During the first year of the study all teachers from Group 1 schools (experimental group) were trained to implement the SWF program and Group 2 teachers (control group) continued to function in their traditional way. During the second year of the study all Group 2 teachers were trained to implement the SWF program, and Group 1 teachers received additional training in the SWF philosophy and methods as they continued to use the program.

All pupil measures were administered at the beginning of the 1972-73 school year as a pretest, at the end of that school year and again at the end of the 1973-74 school year as a posttest. Observation data were collected five times: (1) pre-

treatment observation in October 1972, (2) first-year posttreatment observation in May 1973, (3) observation of classroom meetings in the Group 1 experimental schools only in April 1973, (4) second-year posttreatment observation in May 1974 and (5) observation of classroom meetings in all schools in April 1974.

III. CONTROL GROUP TREATMENT

The first-year control treatment was an attempt to continue the school organization of previous years. In primary grades this meant a typical self-contained classroom approach, with district-recommended content area and classroom but with each teacher's individual classroom practice. Pupils in grades 4 to 6 had homeroom teachers who taught some content areas, but they moved to the rooms of one or more other teachers for different content areas.

The only control of their activities during the first year was a professional request that control group teachers refrain from studying or implementing the Glasser philosophy during this time period.

During the second year these control teachers received training in the SWF philosophy and strategies and began to implement them in their classrooms.

IV. EXPERIMENTAL TREATMENT I

In-service training in Schools Without Failure methods and classroom implementation of these methods during the training period are the bases of the experimental treatment used with the experimental (Group 1) schools during the 1972-73 school year and with the control (Group 2) schools during 1973-74.

The Schools Without Failure method is based on Glasser's principles of Reality Therapy applied to group situations in schools. As Glasser explains in The Identity Society (1972), school-age children, in contrast to their goal-oriented parents and grandparents, are role-oriented. Unless they achieve a successful identity, they are unwilling to accept and work toward goals for education or life. Glasser states:

> People with successful identities usually behave under stress in ways that cause pain to decrease and later enable them to experience pleasure. . . [They] learn to cope with anger or its civilized derivatives, such as depression and anxiety, quickly and effectively by working to turn the situation toward involvement. . . Failures, on the other hand, usually respond impulsively to anger, often decreasing both their security and their involvement (Glasser, 1972, pp. 55, 58, 59).

Involvement is the fundamental concept of Schools Without Failure. If children have been exposed to continued failure and see themselves as failures, involvement with successful persons and a chance to see themselves succeeding are necessary to help them gain a positive self-concept. After they learn to accept themselves as successful and worthwhile persons, they can learn to work toward goals.

Leadership Team Workshops

Leadership teams, including the principal and staff-selected teachers from each school, formed a training cluster for the workshops. These workshops, conducted by an experienced associate of Dr. Glasser, were intensive two- or three-day training periods separated by five-week intervals. Dr. Glasser's associate presented the theories of Reality Therapy and Schools Without Failure and the various implementation techniques to help the leadership teams plan seminars for their individual faculties.

The leadership workshops provided mutual support and encouragement, as well as information and ideas, by allowing time for discussion of problems which occurred in school seminars and classrooms. New techniques and solutions to problems were tried in the five-week intervals between workshops, and results of these trials were presented to the training cluster, keeping the workshop always related to actual problems within the schools.

Training Seminars

The leadership teams conducted weekly seminars for the entire faculty in their own schools. During the first year of the program all principals were involved in the training and took part in the seminars in the experimental schools. During the second year, when the previous control schools were participating in the program, the principals again were part of the leadership teams for these schools.

At these weekly seminars the Schools Without Failure concepts were presented, ideas for implementation techniques were provided, and discussion of problems was encouraged. After trying the various suggestions in their classrooms, the teachers reported on their successes or problems of the previous week, accepted suggestions for alternate solutions from fellow teachers and received inspiration for continued effort.

The two important phases of Schools Without Failure implemented during the first year of the program in each group were classroom meetings and the Reality Therapy approach to solving disciplinary problems. This implementation, however, led also to fulfillment of the following major objectives of the training seminar :

1. To provide opportunities for principals and teachers to develop a positive, personal philosophy of education so they may develop their own school without failure.

2. To provide ways for building constructive communication networks within the school and between the school and the community.

3. To provide a process for developing classroom skills and procedures that teachers and principals need to implement a success-oriented curriculum.

4. To provide the background for building a school environment in which the staff and the pupils may deal realistically with their problems through the resources at hand.

Classroom Meetings

The Schools Without Failure program involved children in learning to make responsible decisions about their lives. The major technique for accomplishing this

was the holding of nonjudgmental classroom meetings wherein the teacher becomes involved with the children and all children can experience success. These meetings, designed to meet the intellectual, social and emotional needs of each child, were held at least three times a week throughout the school year. As they learned to use them successfully, some teachers held one type of meeting or another every day. Other teachers occasionally allowed unscheduled events to interfere with meetings and held fewer than the required three per week. However, this was the basic route to involvement of pupil with teacher.

Open-ended meetings, the first type introduced, are the easiest for teachers learning the technique to lead. In open-ended meetings, children discussed thought-provoking questions related to their lives or to fantasy situations. The teachers did not look for a single correct answer to a question, but tried to stimulate thoughtful, creative opinions in which children could relate what they knew to the topic. Children of all elementary grade levels became deeply involved in, and intellectually stimulated by, such dialogue.

Educational-diagnostic meetings, introduced to the teachers later in the year and tried in the classroom, always related to something the class had been studying. Children talked about their understanding of a specific topic, its implications and applications to their lives. In addition to stimulating thinking, this type of meeting gave the teacher a quick evaluation of his or her success in presenting a concept to the class. Pupils were never graded or rated in any way on the basis of these meetings, but teachers did use information gained to plan further teaching strategies.

Social problem-solving meetings were cautiously introduced late in the year. In these meetings children offered ideas on actual problems of the class. Teachers who felt comfortable with the class meeting method were able to try this type of meeting, but others were not ready to face the problems which could arise. Where these were used, the experience of belonging to a working, problem-solving group helped the children learn that they can use their brains to help solve the problems of living in a difficult, sometimes hostile and mysterious world.

Successful operation of class meetings of any type was the major technique used in this study. This method allowed the teacher to become more involved with the pupils, and pupils became more involved with each other. A vital extra was better training in listening. Not only did pupils learn to listen to each other, but teachers began to listen to pupils.

Discipline Practices

The Schools Without Failure approach to discipline is based on logical, natural consequences expressing the reality of the social order; that is, rules which must be learned in order to function adequately. It is concerned with what will happen in the present. Responsibility must be assumed by the individual, not by a teacher or principal who assumes the child's responsibility by applying punishment. The basic method involves a statement from the child of what he or she actually did which was unacceptable behavior, an evaluation by the child of the effect of this behavior on himself or herself and on others, and suggestions by the child for ways to improve subsequent behavior with a commitment to try the better approach. From the teacher or other adult, this method requires a friendly involvement and a willingness to accept any reasonable suggestion for improvement made by the child.

It is a time-consuming teaching process, based on close, sustained involvement, which emphasizes teaching ways to act that will result in more successful behavior. (Glasser, 1972, pp. 107-132)

This method of handling discipline problems was introduced during seminars the second semester of the program. Teachers and principals introduced it into the schools with increasing success as they became more proficient with its use. Teachers asked children to evaluate their own behavior, to make plans for changing in ways that would lead to success, and to make commitments to carry through the plan with the encouragement and support of the involved teacher. Children who had not responded to punishment by improved behavior began to accept a new responsibility and to look intelligently at their own actions and the effects these actions had on others.

V. EXPERIMENTAL TREATMENT II

During the second year of the SWF program the first year experimental teachers contined to follow Glasser's philosophy in their classrooms. Their leadership teams met for one-day workshops six times throughout the year with a representative from Glasser's Educator Training Center. Each leadership team workshop was followed by a half-day building seminar.

The goals of these workshops and seminars were:

1. To enhance the development and commitment of the previous training in Schools Without Failure.

2. To reinforce concepts and increase skills by sharing experiences in using techniques previously learned.

3. To develop a knowledge of and a commitment to the advanced principles of Schools Without Failure.

4. To develop an in-service procedure using SWF techniques in intergroup relations for implementation of school desegregation.

VI. INSTRUMENTATION

Data gathering devices used in this study included pupil achievement tests and attitude scales, teacher and parent attitude measures, classroom observation schedules, and a form for recording discipline referrals to the school principals. All of the pupil measure were administered in the fall of 1972, in the spring of 1973 and in the spring of 1974. The parent and teacher scales were completed by most participants during the spring of 1972, 1973 and 1974 to provide measures for the same time of year in each case. Observation in a random sample of classes from both experimental and control groups was conducted in regular classes in October of 1972 and May of 1973 and 1974; and classroom meetings were observed in experimental schools in April 1973 and in all schools in April 1974. Principal referral forms were used throughout the second semester of the 1971-72 school year and both semesters of the 1972-73 and 1973-74 school years.

Pupil Attitudes

Attitudes Toward Self. To measure the effects of the SWF program on pupil self-attitudes, the Pictorial Self-Concept Scale (grades 1 to 3) and the Piers-Harris Children's Self-Concept Scale (grades 4 to 6) were used. Both scales were constructed according to Jersild's theoretical definition of self-concept (Jersild, 1952). In a study reported by Bolea, Felker and Barnes (1971) the correlation found between scores on these two scales was .42 for a sample of 63 elementary school children.

The Pictorial Self-Concept Scale developed by Bolea, Felker and Barnes (1971) consists of 50 picture cards with simplified line drawings. A central figure, designated by a star and depicted in various situations, is a male on cards used with boys and a female on cards used with girls. The child sorts the cards into three piles indicating that the starred figure is "like me," "sometimes like me," or "not like me." The authors reported a split-half reliability of .85 when used by 1,813 pupils in grades K to 4. They also reported six studies providing validity evidence (Bolea, Felker and Barnes, 1971).

In the first year of the present study the split-half reliability was computed separately for each of grades 1, 2 and 3, for pretest and posttest, and for experimental and control groups. These coefficients ranged from .72 to .79, with a mean of .75 for all groups.

The Piers-Harris Children's Self-Concept Scale consistently shows reliability coefficients of .90 or higher according to the test manual. Five studies supporting the validity of the scale are also included in the manual. Reliability coefficients computed in the first year of the present study for pretest and posttest in experimental and control classes for grades 4, 5 and 6 were comparable, ranging from .92 to .94 with a .93 average.

Attitudes Toward School. The 30-item School Attitude Scale was developed to measure children's attitudes toward school. A faces response form was used for primary pupils, and the same scale with a verbal response form was used for intermediate pupils. Reliability for the faces form averaged .89 for grades 2 and 3 in pretest and for experimental and control groups in grades 1 to 3 for the posttests. Only the 18 items of the instrument which beginning first graders could be expected to understand were given to them for the pretest. The reliability for this short form was .85.

The verbal response form of the School Attitude Scale showed a reliability of .91 for grades 4 to 6 on the pretest and averaged .92 for control and experimental classes in each of the three grades on the posttests. The Pennsylvania Educational Quality Assessment Attitude Toward School instrument was also administered in grades 4 to 6. With over 20,000 grade 5 pupils, this instrument had shown a reliability of .75, and the pretest of the present study also showed .75 for the total of all 4th, 5th and 6th graders. For separate experimental and control groups in each of grades 4 to 6, reliability coefficients ranged from .57 to .76 with an average of .66 when computed for these smaller groups on the first year posttest.

Pupil Achievement

The Stanford Achievement Test battery, 1964 edition, Form W, was administered to pupils in September 1972 and May 1973 and 1974. Only the reading subtests

were administered to grades 1 and 2, but the other grades took the language and arithmetic subtests. Split-half reliabilities for the various Stanford subtests at all levels are .71 or higher, with most showing a reliability greater than .85.

Teacher Attitudes

Three scales measuring various facets of teacher thought were completed by most teachers at the end of the 1971-72 school year. Teachers who were new or who for some reason had not done it completed these in September 1972. Scales from the total group of teachers were scored as the pretest. All teachers completed the scales again in May of 1973 and 1974.

Opinionnaire on Attitudes Toward Education. Lindgren and Patton's "Opinionnaire" (Shaw and Wright, 1967, pp. 80-83) was used as a measure of attitudes toward child-centered education, discipline and the desirability of understanding pupils' behaviors. The authors reported a split-half reliability of .82 for the scale and several studies supporting its validity. In the first year of the study coefficient alpha reliability was .89 for the pretest and .84 for the posttest.

Satisfaction With Teaching Questionnaire. DiVesta and Merwin's "Attitude Toward Teaching as a Career" (Shaw and Wright, 1967, pp. 73-74) was used as a measure of satisfaction with teaching. In a study by its develcpers this scale discriminated between students choosing to teach and those choosing other careers. Because the scale was developed for preservice teachers, slight revisions were made in three items for use with New Castle teachers. The revised scale showed a coefficient alpha reliability of .74 on the pretest and .69 on the first year posttest.

Philosophy of Glasser Questionnaire. A 15-item scale measuring attitudes toward the philosophy of William Glasser was constructed for use in this study. This instrument had a coefficient alpha reliability of .77 when administered to New Castle School District teachers both in the spring of 1972 and the spring of 1973. Experts in Glasser's philosophy from the staff of Educator Training Center were consulted to insure content validity during the development of the instrument.

Parental Attitudes

Because the Schools Without Failure approach stresses parental and community involvement, the "Philosophy of Glasser Questionnaire" completed by the teachers was alsc sent to parents. The parents of pupils in all New Castle elementary schools received the scale in the fall of 1972 and again in the spring of 1973 and 1974. The New Castle School District administration estimated that almost 90 per cent of parents responded. The reliability of parent responses was computed as .64 in the fall of 1972 and .70 for the spring of 1973.

Classroom Observations

In addition to self-report scales and paper and pencil tests, observation of actual classroom verbal interaction was used to assess pupil and teacher behavior change. The Expanded Category System (Amidon, 1970) and the Reciprocal Category System (Ober, Wood and Roberts, 1968) were used by pairs of observers. Both systems require raters to write down, at three second intervals, number and letter codes representing verbal behavior.

In August 1972 eight experienced elementary teachers were selected and trained in one of the two observation systems. In each case the training was done by a developer of the system, i.e., Edmund Amidon for the Expanded Category System (ECS) and Richard Ober for the Reciprocal Category System (RCS). Review training was held in October 1972 and April 1973 and 1974, immediately preceding the observation periods, to allow the raters to gain actual classroom experience and to run reliability checks through the use of training tapes. The October training tapes and practice observations were of regular classes and the April 1973 tapes and observations were of classroom meetings. In 1974 the training included both regular classes and classroom meetings. (Appendix A shows the two observation schedules.)

A random sample of approximately half the teachers was selected for observation. The sample was stratified so that the number of teachers at each grade level was equal, and the content areas taught were the same for both experimental and control teachers. The teams of two raters observed two normal instructional periods per teacher in October and two in May. During the first year the teams observed two classroom meetings for experimental teachers only during April. In 1974, with all teachers participating in the SWF program, the teams observed two classroom meetings for all teachers in the observation sample groups.

Expanded Category System. In the ECS Amidon (1970) expanded the 10 categories of the Flanders System of Interaction Analysis (Flanders, 1970) so that such details as type of question asked by the teacher, type of praise given, or type of criticism used could be recorded. The raters trained in this system achieved interrater reliability as computed by Scott's method (Scott, 1955) of .85 by the end of the October training session. In April 1973, when coding classroom meeting tapes, they obtained a coefficient of .80. During the April 1974 training session and observation period, reliability checks yielded coefficients ranging from .79 to .90.

Reciprocal Category System. Ober, Wood and Roberts developed the RCS to provide additional pupil categories, allowing the recording of pupil-pupil and teacher-pupil interactions. The raters trained in this system achieved a Scott's coefficient of .79 on the training tape in October and .80 on a classroom meeting tape in April 1973. During April 1974 training sessions and observation periods, reliability checks yielded coefficients ranging from .83 to .87.

On all observations a team of two raters recorded both systems simultaneously. Each teacher was observed twice in each observation period and the scores were averaged, producing a mean score for the analysis. Although 80 teachers were observed the first year, only 71 were still teaching in the same schools the second year, thus reducing the total number of mean scores in the analysis.

Principal Referral Form

An additional check on the behavior of pupils and staff was a recording of all occasions when pupils were sent to the office for disciplinary problems. Beginning in the second semester of the 1971-72 school year, the principals completed referral cards for each such event, including the child's name and information on what happened, when, who else was involved, and any action taken. Comparisons were made for the 1971-72, the 1972-73 and the 1973-74 school years.

VII. ANALYSIS OF DATA

Questions Answered by the Analyses

As data from the study were analyzed, three major questions were asked:

1. During the two years of the study, did greater changes occur in Group 1 schools than in Group 2 schools?

Since Group 1 schools used the SWF program for two years and Group 2 schools used it for one year, this question was asked to determine if carrying out the program for two years produced any greater changes than did carrying it out for one year. In answering the question 1972 measurements taken in both groups of schools before the Group 1 schools began the program were used as covariates of spring 1974 measurements in univariate and multivariate analyses of covariance. For example, 1974 pupil self-concept scores of the two groups were compared after adjusting them to take into account any-self concept differences existing between the two groups before either group tried the SWF program. The covariance adjustments were carried out in such a way that even though one group might have had higher 1972 self-concept scores than the other, it would be expected that without any program intervention the adjusted 1974 means of the two groups would not differ. If differences were found in these adjusted means they would be assumed to be a function of changes occurring in self-concepts of pupils due to the implementation of the SWF program.

2. During the second year of the study, did greater changes occur in Group 1 schools or in Group 2 schools?

During the 1973-74 school year Group 1 schools were involved in their second year of training and Group 2 schools were participating for the first time. Thus, question 2 helped determine whether greater changes in schools occurred during their first year of use of the SWF program or during the second year of their program, when their proficiency in carrying it out had increased. In answering this question spring 1973 scores of Group 1 and Group 2 schools were used as covariates of their spring 1974 scores in univariate and multivariate analyses of covariance.

3. Over the course of the two years of the study, what changes took place in Group 1 schools which would not have taken place in schools using a traditional program?

Because Group 2 schools decided to adopt the SWF program during the 1973-74 school year, data collected from schools not using the program were available for only one school year. However, because both fall and spring testings were carried out during this one school year, it was possible to approximate the desired situation in the analyses.

By the end of the 1974 school year Group 1 pupils in grades 2 through 6 had participated in two years of the SWF program. In analyzing pupil data it was first asked if Group 1 and Group 2 pupils in grades 2 through 6 typically differed before Group 1 schools began to use the SWF program. Data for these analyses were readily available from the fall 1972 testing.

Since Group 2 schools did not participate in the SWF program during the 1972-73 school year, the data from their spring 1973 testing of pupils in grades 2 through 6 were then compared with spring 1974 data of Group 1 pupils in grades 2 through 6. This, then, provided an approximation to the desired situation of comparing two-year changes in pupils exposed to the SWF program with those of pupils never exposed to it. The same general plan of analysis was followed for teacher data and for parent data. In answering question 3 univariate and multivariate analyses of variance were used.

VIII. INFORMAL EVALUATION

In addition to the statistical analyses of tests, questionnaires and other attitude scales, an informal subjective evaluation was conducted among the New Castle elementary teachers and principals during March 1974. The leadership teams of both experimental and control schools each devoted a morning session of their March leadership workshop to an evaluation of the SWF program based on their experiences throughout the time they had worked with SWF. During the afternoon sessions they worked on the formulation of recommendations for further activity.

Using these workshop experiences as a background, the leadership teams conducted half-day evaluation sessions in their own schools. They solicited program evaluations from all staff members. On Friday all leadership team members joined in a final workshop to combine, condense and organize the evaluations into manageable form for publication. These staff opinions were presented to the district school directors with their recommendations for program continuation.

CHAPTER III

RESULTS AND DISCUSSION

Classroom Interactions

By the end of two years the SWF program was found to have had a major effect upon the classroom behaviors of teachers. Teachers were, first of all, found to be holding classroom meetings which typified those called for in the program. In these meetings teachers acted as discussion facilitators, questioning rather than lecturing. They primarily asked questions that had no specific right answer and responded to pupil answers in a nonjudgmental way, accepting ideas rather than praising or criticizing them.

In a comparison of interactions taking place in classrooms where the SWF program was used for two years (Group 1, 1974) with those occurring in classrooms where it was never used (Group 2, 1973), major differences were found in certain categories of the Expanded Category System (Appendix A). In primary SWF classrooms there was more questioning, particularly fact-memory questioning, than in non-SWF classrooms. Conversely, in non-SWF classrooms there was more lecturing. Primary SWF teachers accepted pupil ideas more than did non-SWF teachers. They used less criticism, particularly criticism with public criteria, and less praise with no criteria given than did non-SWF teachers. Primary pupils in SWF schools spent more class time talking than did primary pupils in non-SWF schools.

The results obtained for intermediate classrooms differed little from those for primary classrooms. Intermediate SWF teachers used more questioning, particularly fact-memory and evaluative questioning, than did intermediate teachers in non-SWF schools. Non-SWF teachers lectured more than did SWF teachers. In responding to pupils SWF teachers used more acceptance of ideas than did non-SWF teachers. In contrast to this, non-SWF teachers used more praise, particularly praise with no criteria given, than SWF teachers. Although non-SWF teachers tended to use more criticism than did SWF teachers, this difference was not significant.

In a comparison of interactions occurring in the classrooms of these same teachers in the fall of 1972, only one significant difference was found: primary Group 2 teachers lectured more than primary Group 1 teachers did. Group 1 and Group 2 primary teachers differed in this way both initially and after Group 1 teachers had experienced two years of SWF training.

It was found, then, that teachers using the SWF program did change their behavior in instructional sessions. The changes made these sessions more like classroom meetings than were the same teachers' instructional sessions before training.

Pupil Discipline

Another major change taking place in SWF schools was in pupil discipline. During the first year of the study (1972-73) the percentage of Group 1 pupils referred at least once to their principals for disciplinary reasons (6.8%) differed significantly from the percentage of pupils referred in Group 2 schools (12.3%). The two groups did not differ significantly in disciplinary referrals during the

final four months of the 1971-72 school year. During the second year of the study Group 2 schools experienced a decrease in total disciplinary referrals: the percentage of pupils referred dropped significantly from 12.3 per cent in 1972-73 to 6.8 per cent in 1973-74. The percentage of referrals in Group 1 schools in 1973-74 (6.4%) did not differ significantly from that occurring in Group 2 schools. Thus, SWF teachers' use of Reality Therapy in dealing with pupil discipline problems resulted in their increased ability to handle these within their own classrooms. The decreases in referrals could also be attributed to pupils causing fewer discipline problems in SWF schools than in non-SWF schools.

Pupil Attitudes

When the effects of the SWF program upon pupils were examined, one highly interesting result was found for one of the instruments used to measure intermediate pupil attitudes. One of the factors of the EQA Attitude Toward School instrument was termed Importance of School. During the first year of the study there were indications that positive changes were occurring in the responses of Group 1 pupils to a number of the items of this factor. During the second year of the study these scores of pupils exposed to the SWF program for two years (Group 1, 1974) differed significantly from those of pupils never exposed to the program (Group 2, 1973). Both groups underwent positive changes in their scores during the 1973-74 school year. The two groups did not differ significantly in their scores on the factor in the fall of 1972, when neither group had been exposed to the SWF program. Thus, the indications are that pupils in the SWF program came to believe more strongly that school and learning were important than did pupils not participating in the program.

In the primary grades there were also some indications that positive attitude changes were occurring more in SWF pupils than in non-SWF pupils, especially in regard to doing schoolwork, working independently in school and doing hard arithmetic problems. These results may indicate that primary pupils exposed to the SWF program began to feel more confident in their abilities to deal with difficult schoolwork than did primary pupils who never participated in the program.

Pupil Achievement

The results in the area of pupil achievement seem to indicate, first of all, that in the beginning stages of the program some period of adjustment must take place for both pupils and teachers. For two verbal subscales, achievement gains of pupils dropped off somewhat during the first year of the program's use, but returned to their previous level during the second year. Overall, however, achievement scores of pupils participating in the SWF program for two years were not found to differ from scores of pupils in comparable schools where the program was not as yet implemented. Of special interest were the achievement scores of grade 2 pupils in schools where the program was used for two years. These pupils scored somewhat higher on all three verbal subscales administered than did grade 2 pupils in either of the two groups of schools tested at the end of the first year of the study. Since the pupils scoring higher were the only ones in the study whose entire school experience took place in an SWF school, it is possible that comparisons in future years could indicate that there is some benefit to pupil achievement in attending an SWF school, particularly where no adjustment from previous methods is required.

Teacher Attitudes

In examining teacher attitude scores it was found that Group 1 teachers became more accepting of the SWF philosophy while undergoing their first year of

training. However, attitude scores of these teachers did not increase during the second year of the study nor did those of Group 2 teachers during their first year of training in 1973-74. Thus, teachers were not found to have changed greatly in their attitude toward the SWF philosophy. This result may be because in the initial testing of the study most teachers were in general agreement with the philosophy. To carry out the program, then, little attitude change was needed.

During the informal evaluation sessions, the teachers and elementary principals discussed their perceptions of the changes resulting from the SWF program. The general tone of these discussions was favorable to the program.

Teachers and principals felt communication had improved between and among all segments: students, teachers, administration, parents and community. Teachers felt they understood pupil problems better, could cope with them more effectively and had an increased attitude of concern and caring. Pupils had learned to express themselves more freely, a skill approved by most teachers but considered a problem by others.

The workshop training and weekly seminars during the first year of the program were the most helpful part of the program for most teachers. These sessions contributed to faculty and staff morale by improving intercommunication and by giving the teachers specific techniques and strategies for solving classroom problems.

Because the reaction from all schools was overwhelmingly favorable toward continuation of the program, the district superintendent recommended to the board of education that the SWF program be continued for another year.

Parent Attitudes

Parent attitudes did not change greatly. In general, parents appeared to agree with the involvement aspects of the philosophy in the initial testing but also held rather positive attitudes toward traditional approaches to education. A trend toward less acceptance of the SWF philosophy did take place, however, for Group 1 parents during the second year of the study. This result can be attributed to the effects upon parental attitudes of a public attack upon the SWF program. This attack was carried out by a highly vocal minority of New Castle residents and by persons from outside the city who held negative attitudes toward all programs similar to the SWF program.

CONCLUSIONS

The results of the study, then, indicate that the Schools Without Failure training program has a potential for producing rather strong changes in the classroom behaviors of teachers. Teachers exposed to the program were also found to hold positive attitudes toward its methods.

The changes taking place in teachers' classroom behaviors appeared to be having positive effects upon pupils, especially upon their school attitudes. So these effects can be more fully examined, longer studies of the program should be carried out in the future.

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Appendix A

Summary of Categories for the Expanded Category System

Category 1 -- Accepts Student Feelings

1a -- Acknowledges feelings. The teacher simply acknowledges the presence of some feeling in the classroom; she may identify the feeling by name.

1c -- Clarifies feelings. The teacher attempts to relate the feeling he observes to a probable cause.

1r -- Refers to similar feelings of others. The teacher indicates that the feeling he observes is natural or normal by referring to similar feelings that he has, or that people in general have, in like circumstances.

Category 2 -- Praises

2w -- Praises with no criteria. The teacher tells the student he is right or that what he has done is good, but gives no reason for the positive evaluation.

2P -- Praises with public criteria. The teacher praises the student and gives a reason for the positive evaluation that is publicly verifiable and acceptable. An accepted authority, like the dictionary, may be used as the criterion for evaluating factual matters.

2p -- Praises with private criteria. The teacher praises the student and explains that the praise is based on her private (nonauthoritative) standards or opinions. Statements in this subcategory communicate the teacher's preferences.

Category 3 -- Accepts Student Ideas

3a -- Acknowledges ideas. The teacher acknowledges a student contribution by simple reflection or a word such as "okay." No evaluation of the student's contribution is included in statements in this subcategory.

3c -- Clarifies ideas. The teacher goes beyond simple acknowledgment of the student's contribution by restating the student's idea or speculating on its implications.

3s -- Summarizes ideas. The teacher acknowledges contributions of several students by enumerating them or organizing them into a coherent sequence.

Category 4 -- Asks Questions

4f -- Asks factual questions. The teacher asks for a simple factual response. Questions in this category require recall rather than problem-solving or opinion-giving.

4c -- Asks convergent questions. The teacher asks the student to compare or contrast, to relate two or more things in a significant manner, or to follow some formal procedure for solving problems, such as a mathematical formula.

4d -- Asks divergent questions. The teacher asks the child to predict, to develop hypotheses, or to speculate on outcomes of actions in a hypothetical situation that does not permit evaluation of student responses as right or wrong.

4e -- Asks evaluative questions. The teacher asks students for their evaluation of an idea or an event as better or worse, more or less appropriate, and the like. Evaluation of student response as right or wrong is precluded by the nature of the question.

Category 5 -- Lectures

5f -- Factual lecture. The teacher communicates factual information or subject-matter content.

5m -- Motivational lecture. The teacher attempts to communicate enthusiasm or excitement about subject matter to children or in some other way arouse interest through the use of lecture statements.

5o -- Orientation lecture. The teacher describes the procedure for approaching subject matter or presents some framework for what the class has been doing or will do.

5p -- Personal opinion lecture. The teacher provides personal opinions or evaluations of ideas or procedures.

Category 6 -- Gives Directions

6c -- Gives cognitive directions. The teacher asks children to do a task primarily cognitive rather than overtly physical, such as writing the answer to a problem on the board.

6m -- Gives managerial directions. The teacher directs the student or students to perform a physical maneuver, such as moving chairs.

Category 7 -- Criticizes

7w -- Criticizes with no criteria. The teacher criticizes with no explanation of the reason for the criticism.

7P -- Criticizes with public criteria. The teacher criticizes a student and explains the criticism in terms of public standards for evaluation.

7p -- Criticizes with private criteria. The teacher criticizes a student and explains the criticism in terms of his personal preferences or aversions.

Category 8 -- Predictable Student Talk

8f -- Factual student talk. The student gives factual information, usually in response to a teacher question classified as 4f.

8c -- Convergent student talk. The student makes a statement involving use of facts in a specified process, such as following a formula or contrasting events, usually in response to a teacher question classified as 4c.

Category 9 -- Unpredictable Student Talk

9d -- Divergent student response. The student speculates or hypothesizes on how things might be (or might have been) under given circumstances, usually in response to a teacher question classified as 4d.

9e -- Evaluative student response. The student gives his evaluation of an idea or event as better or worse, more or less appropriate, etc., usually in response to a teacher question classified as 4e.

9i -- Student-initiated talk. The student makes an unsolicited comment.

Category 10 -- Silence or Confusion

10s -- Silence. There is a period of at least three seconds in which no one is talking.

10c -- Confusion. There is a period of at least three seconds in which more than one person is talking, and it is not possible to hear what a single person is saying.

Appendix A (cont'd)

Summary of Categories for the Reciprocal Category System

Category Number Assigned to Party 1[1]	Description of Verbal Behavior	Category Number Assigned to Party 2[2]
1.	"WARMS" (INFORMALIZES) THE CLIMATE: Tends to open up and/or eliminate the tension of the situation; praises or encourages the action, behavior, comments, ideas and/or contributions of another; jokes that release tension not at the expense of others; accepts and clarifies the feeling tone of another in a friendly manner (feelings may be positive or negative; predicting or recalling the feelings of another are included).	11
2.	ACCEPTS: Accepts the action, behavior, comments, ideas and/or contributions of another; positive reinforcement of these.	12
3.	AMPLIFIES THE CONTRIBUTIONS OF ANOTHER: Asks for clarification of, builds on, and/or develops the action, behavior, comments, ideas and/or contributions of another.	13
4.	ELICITS: Asks a question or requests information about the content subject, or procedure being considered with the intent that another should answer (respond).	14
5.	RESPONDS: Gives direct answer or response to questions or requests for information that are inititated by another; includes answers to one's own questions.	15
6.	INITIATES: Presents facts, information and/or opinion concerning the content, subject, or procedures being considered that are self-initiated; expresses one's own ideas; lectures (includes rhetorical questions--not intended to be answered).	16
7.	DIRECTS: Gives directions, instructions, orders and/or assignments to which another is expected to comply.	17
8.	CORRECTS: Tells another that his answer or behavior is inappropriate or incorrect.	18
9.	"COOLS" (FORMALIZES) THE CLIMATE: Makes statements intended to modify the behavior of another from an inappropriate to an appropriate pattern; may tend to create a certain amount of tension (i.e., bawling out someone, exercising authority in order to gain or maintain control of the situation, rejecting or criticizing the opinion or judgment of another).	19
10.	SILENCE: Pauses, short periods of silence.	
	CONFUSION: Periods of confusion in which communication cannot be understood.	20

[1]Category numbers assigned to Teacher Talk when used in classroom situation.
[2]Category numbers assigned to Student Talk when used in classroom situation.